12/15/2006 Response to Office Action U.S.S.N. 10/601,601

Page 4

## REMARKS

Claims 1-4, 6-11, 14, 16-18 are pending. Claim 11 had been withdrawn from consideration as being drawn to a non-elected claim. Claims 1 and 6 are currently amended.

The Office Action has rejected claims 1-4, 6-11, 14, 16 and 17 under 35 U.S.C. §103(a) as allegedly being unpatentable over Chen et al. (WO 02/02279) in view of Grumbine et al. (U.S. Patent Application 20030194959). The Office Action States that Chen et al. fail to teach a specific void volume, or a specific average groove width of the first, or second, or the combination of first and second grooves. The Office Action relies on Grumbine et al. to provide the teaching of a polishing pad having a void volume of between 25% and 50%. The Office Action asserts that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the Chen et al. pad with the claimed void volume as taught by Grumbine et al., to allow polishing solution to be transported across the pad, as is known in the art.

The applicant respectfully disagrees. Applicant has amended claim 1 to include the limitation of a void volume of greater than 50% and less than 95%. Additionally claim 6 is amended to be consistent with amended claim 1. Support for the amendments is found in the original specification, for example at paragraph [0030]. The Office Action asserts that Grumbine discloses that it is known to make abrasive tools having a void volume of between 25-50%. The upper value of Grumbine *et al.* does not anticipate the range in amended claim 1. Applicants respectfully request that the rejection under 35 U.S.C. §103(a), with respect to claims 1-4, 6-11, 14, 16 and 17, be withdrawn.

The Office Action has rejected claims 18-21 under 35 U.S.C. §103(a) as allegedly being unpatentable over Chen et al. in view of Grumbine et al., as applied to claim 1 and further in view of Wadensweiler et al. (U.S. 6,841,057). The Office Action states that Chen et al. as modified by Grumbine et al. does not disclose that the polishing pad comprises abrasive, or that the body of the polishing pad is conductive, comprising conductive elements or a conductive polymer. The Office Action states that Wadensweiler et al. teach that it is known to make polishing pads abrasive, that when used with a polishing medium, facilitates material removal from the substrate. The Office Action asserts that it would have been obvious to one of ordinary skill in the art to have provided Chen et al. with the abrasive taught by Wadensweiler et al. to facilitate material removal from the substrate. The Office

Cabot Microelectronics Corporation 870 North Commons Drive Aurora, IL, 60504 Tel. (630) 375-5465 12/15/2006 Response to Office Action U.S.S.N. 10/601,601

45:42006 09: 47: FAX: 63'04'99 2654

Page 5

→ CENTRAL FAX

Action further asserts that based on the teachings of Wadensweiler et al., it would have been obvious to one of ordinary skill in the art to have made the pad of Chen et al. conductive though the use of conductive elements or conductive polymer, to allow the pad to be used in eCMP of the substrate, to remove material that is difficult to remove through CMP.

The applicant respectfully disagrees. Claims 19-21 were canceled previously. Claim 18 depends on amended claim 1, and therefore is nonobvious in view of the current amendment. Applicant respectfully requests that the rejection under 35 U.S.C. §103(a), with respect to claim 18, be withdrawn.

In view of the above remarks and amendments, reconsideration and allowance is respectfully requested. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned at the number listed.

Respectfully submitted,

Thomas Omholt Reg. No. 37,052

(630) 375-2033

**Cabot Microelectronics Corporation** 870 North Commons Drive Aurora, IL, 60504 Tel. (630) 375-5465